

# Work Order ID 117556

April-25-14 10:21:46 AM

*ASAP*  
**\*117556\***

Page 1

Item ID: D5046-041

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Co-Pilot Collective Head Assembly (205)

Start Date: 4/25/14 Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 5/07/14 Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals:

Process Plan: *W*

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D5046

A

110 Weld per dwg A/R Aluminum rod Batch: *M12392* 0.00

**\*110\***

Large Fab

Memo

0.00

Large Fab

WELD D4410-7 to D5046-1 AS PER DWG

*8 14-4-29*

120

QC9- Inspect visual per QSI004- Fusion Welds

0.00

**\*120\***

QC

Memo

0.00

Quality Control

*(8) 14-04-29* **DAS 9 9-89**

130

QC5- Inspect part completeness to step on W/O

0.00

**\*130\***

QC

Memo

0.00

Quality Control

*(8) 14-04-29* **DAS 9 9-89**

# Work Order ID 117556

April-25-14 10:21:46 AM

**\*117556\***

Page 2

Item ID: D5046-041

Revision ID:

Item Name: Co-Pilot Collective Head Assembly (205)

Start Date: 4/25/14

Start Qty: 12.00

**\*12\***

Required Date: 5/07/14

Req'd Qty: 12.00

**\*12\***

Reference:

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Stop

**\*NS2\***

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

**\*NR1\***

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

140

Outsource process-Anodize per QSI017 4.1.10.1

0.00

**\*140\***

Outsource4

Memo

0.00

Outsource process - Anodize

Issue P/O:

24023

Black Anodize as per Dwg D5046  
C OF C REQUIRED

C214/04/30 8

150

Receive & Inspect for Damage & Mat'l Certs

0.00

**\*150\***

Packaging

Memo

0.00

Packaging

C OF C REQUIRED

16/4/12 (8)

160

QC6- Inspect dimensions to drawing

0.00

**\*160\***

QC

Memo

0.00

Quality Control

DAS  
27  
3-29  
14/5/12

8

# Work Order ID 117556

April-25-14 10:21:46 AM

**\*117556\***

Page 3

Item ID: D5046-041  
 Revision ID:  
 Item Name: Co-Pilot Collective Head Assembly (205)  
 Start Date: 4/25/14 Start Qty: 12.00  
 Required Date: 5/07/14 Req'd Qty: 12.00  
 Reference:

Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Stop **\*NS2\***  
 Cust Item ID:  
 Customer:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_

Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
 SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_  
 Run Start **\*NR1\***  
 Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170		0.00							
<b>*170*</b>						8			FF
Small Fab	Memo	0.00							14-05-05
Small Fab	RE-PASS HELICOIL TAP IN THREADS AND INSTALL HELI-COIL ASSEMBLE AS PER DWG, ***Insert pin thru 1 side only***								
180		0.00							
<b>*180*</b>						8			
QC	QC5- Inspect part completeness to step on W/O	0.00							
Quality Control	Memo	0.00							
190		0.00							
<b>*190*</b>									
Packaging	Identify as per dwg & Stock Location: _____	0.00							
Packaging	Memo SHIP	0.00				14/5/5	(8)		DAS 32 9-89

**Work Order ID 117556**

April-25-14 10:21:46 AM

**\*117556\***

Page 4

Item ID: D5046-041

Revision ID:

Item Name: Co-Pilot Collective Head Assembly (205)

Start Date: 4/25/14

Start Qty: 12.00

**\*12\***

Required Date: 5/07/14

Req'd Qty: 12.00

**\*12\***

Reference:

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Stop

**\*NS2\***

Cust Item ID:

Customer:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start

**\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

200

QC21- Final Inspection - Work Order Release

0.00

**\*200\***

QC

Memo

0.00

Quality Control

MJS 14-05-05

14-05-05



April-25-14 10:21:46 AM

**\*1 17556\***

**\*D5046-041\***

**Required Qty: 12.00**

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

**\*D4410-7\***

**\*\***

EQ 14-4-29

116127 x 4  
117557 x 4

4

12

**\*D5046-1\***

116356 x 8

**\*\***

Q 144-29

60

**\*\***

**DAS**  
**30**  

---

**9-89**

14/05/05

**\*90296A108\***

Doc Code  
128990

40

12

**\*MS171539\***

**\*\***

**DAS**  
**30**  
~~**9-89**~~

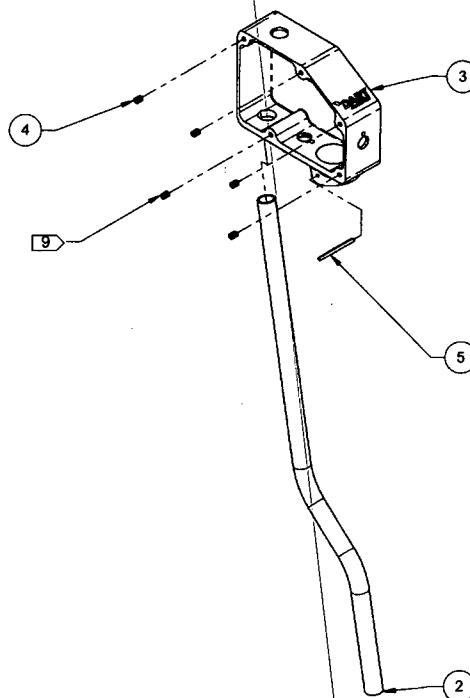
1465/05

123183

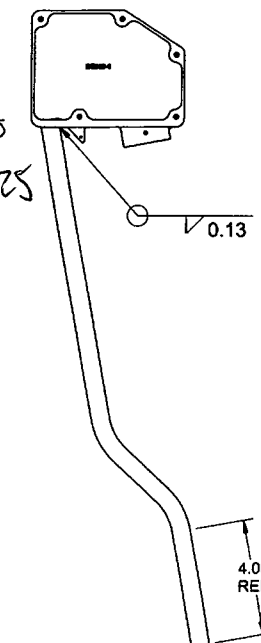
m128799

20

ITEM	QTY	P/N	DESCRIPTION
1	X	D5046-041	CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)
2	1	D4410-7	CONDUIT
3	1	D5046-1	CO-PILOT COLLECTIVE HEAD
4	5	90296A108	HELL-COIL INSERT (6-32 X 0.276)
5	1	MS171539	PIN



117556 MW  
140425



D5046-041 WELDING DETAIL

RELEASED  
2014-04-01

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.91 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING

D5046-041 CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)

APPROVED

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	VS	14.01.22
DESIGN	VS		
DRAWN	VS		
CHECKED	DC		
MFG. APPR.	JFS		
APPROVED	HS		
DE APPR.	DS		
DATE	14.01.22		

DART AEROSPACE USA, INC.  
KENT, WA

DRAWING NO. D5046  
REV. A  
SHEET 1 OF 12  
SCALE  
NTS

COPYRIGHT © 2014 BY DART AEROSPACE USA, INC.  
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.







A.T.G. Industries Inc.  
731, rue Industrielle Rd.  
PLATING DEPARTMENT  
Rockland, On K4K 1T2  
Canada  
Ph: (613) 446-4544  
Fax: (613) 446-4556

### Pack List

Number: 63016

Date: 02-May-14

To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ship To


DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
1 lot	Part: ASST 4 PCS D5046-041 (6.25) 3 PCS D5046-047 (6.25) 8 PCS D5046-041 (6.25) 33 PCS D5049-1 (3.25)  BLACK ANODIZE MIL-A-8625 TYPE II CLASS 2  PRICE IS PER PIECE Job: 20140254	DAS 27 9-29  14/5/14  PO: 24023	Rev:     Line:
<p align="center">Certificate of Conformance</p> <p>A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.</p> <p align="center">ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY</p> <p>DATE : 2/5/14</p> <p>CERTIFIED SIGNATURE : </p> <p>RECEIVER SIGNATURE : _____</p>			